FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO Georgia-Pacific Chemicals, LLC

AUTHORIZING THE OPERATION OF Lufkin Chemical Plant

Plastics Materials

LOCATED AT

Angelina County, Texas

Latitude 31° 20' 13" Longitude 94° 42' 38"

Regulated Entity Number: RN101896439

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:	<u> </u>	_Issuance Date:_	September 16, 2013	
For the Com	mission			

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General Terms and Conditions

The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), 30 TAC § 122.145 (Reporting Terms and Conditions), and 30 TAC § 122.146 (Compliance Certification Terms and Conditions).

In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.

If the permit holder chooses to demonstrate that this permit is no longer required, a written request to void this permit shall be submitted to the Texas Commission on Environmental Quality (TCEQ) by the Responsible Official in accordance with 30 TAC § 122.161(e). The permit holder shall comply with the permit's requirements, including compliance certification and deviation reporting, until notified by the TCEQ that this permit is voided.

The permit holder shall comply with 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit.

All reports required by this permit must include in the submittal a cover letter which identifies the following information: company name, TCEQ regulated entity number, air account number (if assigned), site name, area name (if applicable), and Air Permits Division permit number(s).

Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

- 1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

- D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
- E. The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart OOO and 30 TAC Chapter 113, Subchapter C, § 113.720, 40 CFR Part 63, Subpart SS and 30 TAC Chapter 113, Subchapter C, § 113.500 for the following units: K-1, K-2, K-3, K-4, K-5, MT-1/TK-W-A, TK-W-B, and F-RESIN.
- F. The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart UU and 30 TAC Chapter 113, Subchapter C, § 113.520, 40 CFR Part 63, Subpart SS and 30 TAC Chapter 113, Subchapter C, § 113.500 for the following unit: F-RESIN.
- G. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- H. Emission units subject to 40 CFR Part 63, Subpart G as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.120 which incorporates the 40 CFR Part 63 Subpart by reference.
- I. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)
 - (v) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (vi) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)

- C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEO
- D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
- E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
- F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
- G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
- H. Title 30 TAC § 101.221 (relating to Operational Requirements)
- I. Title 30 TAC § 101.222 (relating to Demonstrations)
- J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
 - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
 - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar

- quarter unless the emission unit is not operating for the entire quarter.
- (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
- (3) Records of all observations shall be maintained.
- (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (5) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in

compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC $\S 111.111(a)(7)(B)(i)$ or (ii)
 - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes.

When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by [h_e/H_e]² as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- E. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

- (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
- (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
- (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
 - B. Title 40 CFR § 60.8 (relating to Performance Tests)
 - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
 - D. Title 40 CFR § 60.12 (relating to Circumvention)
 - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
 - F. Title 40 CFR § 60.14 (relating to Modification)
 - G. Title 40 CFR § 60.15 (relating to Reconstruction)
 - H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)
- 5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
 - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
 - H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)

- 6. For facilities where total annual benzene quantity from waste is less than 1 megagram per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(5)(i) (ii), (a)(6), (b), and (c)(1) (3) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
 - B. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
 - C. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
 - D. Title 40 CFR § 61.357(a), and (b) (relating to Reporting Requirements)
- 7. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
- 8. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).
- 9. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):
 - A. General Leak Detection Requirements:
 - (i) Title 40 CFR § 63.148(d)(1) (3), and (e) (relating to Leak Inspection Provisions)
 - (ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements
 - (iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) (2), (i)(4)(i) (viii), (i)(5), and 63.152(a)(1) (5), for recordkeeping requirements
 - (iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) (iii), (b)(1) (2), (j)(1) (3), 63.152(a)(1) (5), (b), (b)(1)(i) (ii), and (b)(4), for reporting requirements
 - B. For closed vent system or vapor collection systems constructed of hard piping:
 - (i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements
 - (ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements
 - C. For facilities not operating flow indicators:
 - (i) Title 40 CFR § 63.148(f)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

- (ii) Title 40 CFR § 63.148(i)(3)(ii) (relating to Leak Inspection Provisions), for recordkeeping requirements
- (iii) Title 40 CFR § 63.148(j)(3) (relating to Leak Inspection Provisions), for reporting requirements
- 10. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).
- 11. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

12. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

- 13. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit

- C. Are not eligible for a permit shield
- 14. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 15. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.
 - A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.
 - B. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).
- 16. The permit holder shall comply with the following requirements for Air Quality Standard Permits:
 - A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit
 - B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Ouality Standard Permit
 - C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

- 17. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 18. Use of Discrete Emission Credits to comply with the applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

- (i) Title 30 TAC Chapter 115
- (ii) Title 30 TAC Chapter 117
- (iii) If applicable, offsets for Title 30 TAC Chapter 116
- (iv) Temporarily exceed state NSR permit allowables
- B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

Risk Management Plan

19. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

- 20. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
 - B. The permit holder shall comply with 40 CFR Part 82, Subpart F related to the disposal requirements for appliances using Class I or Class II (ozone-depleting) substances or non-exempt substitutes as specified in 40 CFR §§ 82.150 82.166 and the applicable Part 82 Appendices.

Alternative Requirements

21. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from (the EPA Administrator and/or TCEQ Executive Director), demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

Permit Location

22. The permit holder shall maintain a copy of this permit and records related to requirements listed in this permit on site.

Permit Shield (30 TAC § 122.148)

23. A permit shield is granted for the emission units, groups, or processes specified in the attached "Permit Shield." Compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements listed in the attachment "Permit Shield." Permit shield provisions shall not be modified by the executive director until notification is provided to the permit holder. No later than 90 days after notification of a change in a determination made by the executive director, the permit holder shall apply for the appropriate permit revision to reflect the new determination. Provisional terms are not eligible for this permit shield. Any term or condition, under a permit shield, shall not be protected by the permit shield if it is replaced by a provisional term or condition or the basis of the term and condition changes.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Alternative Requirement

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Note: A "none" entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing Requirements" and/or "Recordkeeping Requirements" and/or "Reporting Requirements." Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
BOIL-1	BOILERS/ STEAM GENERATORS/ STEAM GENERATING UNITS	N/A	60Dc	40 CFR Part 60, Subpart Dc	No changing attributes.
BOIL-1	BOILERS/ STEAM GENERATORS/ STEAM GENERATING UNITS	N/A	63DDDDD	40 CFR Part 63, Subpart DDDDDD	No changing attributes.
BOIL-2	BOILERS/ STEAM GENERATORS/ STEAM GENERATING UNITS	N/A	63DDDDD	40 CFR Part 63, Subpart DDDDDD	No changing attributes.
PROFORMAL	CHEMICAL MANUFACTURING PROCESS	N/A	63F	40 CFR Part 63, Subpart F	No changing attributes.
PRO-OFP	CHEMICAL MANUFACTURING PROCESS	N/A	63FFFF	40 CFR Part 63, Subpart FFFF	No changing attributes.
BOIL-2	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
CONVERT	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G-ABS	40 CFR Part 63, Subpart G	Control Device = Absorber used as a recapture device., Alternate Monitoring Parameters = The EPA Administrator has approved alternate monitoring parameters.
CONVERT	EMISSION POINTS/ STATIONARY VENTS/ PROCESS VENTS	N/A	63G-CATINC	40 CFR Part 63, Subpart G	Regulation = Owners or operator is required to comply only with the requirements of 40 CFR Part

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					63, Subpart G., Control Device = Catalytic incinerator., Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate., HAP Concentration = HAP concentration is greater than or equal to 50 ppm., Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.
F-FORM	FUGITIVE EMISSION UNITS	N/A	63H	40 CFR Part 63, Subpart H	No changing attributes.
LOAD4	LOADING/UNLOADING OPERATIONS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
R-LOAD	LOADING/UNLOADING OPERATIONS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.
SG	SRIC ENGINES	N/A	N/A	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPFOR2TK	STORAGE TANKS/ VESSELS	TK-F-1, TK-F-2, TK-F-3, TK-F-4, TK-F-5	63G	40 CFR Part 63, Subpart G	No changing attributes.
GRPFORTK	STORAGE TANKS/ VESSELS	TK-F-10, TK-F-7, TK-F-8, TK-F-9	63G	40 CFR Part 63, Subpart G	No changing attributes.
MT-1/TK-W-A	STORAGE TANKS/ VESSELS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	nit Type Group/Inclusive Units SOP Index No.		Regulation	Requirement Driver	
TK-F-6	STORAGE TANKS/ VESSELS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.	
TK-MEOH-1	STORAGE TANKS/ VESSELS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.	

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
BOIL-1	EU	60Dc	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
BOIL-1	EU	60Dc	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
BOIL-1	EU	60Dc	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
BOIL-1	EU	63DDDD D	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 § 63.7485 § 63.7490 § 63.7495(a) § 63.7500(a)(2)- Table 3.1 § 63.7540	The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	§ 63.7515(d)	§ 63.7555	§ 63.7545 § 63.7550
BOIL-2	EU	63DDDD	112(B)	40 CFR Part 63,	§ 63.7505	The permit holder shall	§ 63.7515(d)	§ 63.7555	§ 63.7545

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
		D	HAPS	Subpart DDDDD	§ 63.7485 § 63.7490 § 63.7495(a) § 63.7500(a)(2)- Table 3.1 § 63.7540 § 63.7590	comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD			§ 63.7550
PROFORMAL	PRO	63F	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.102(b)(3) [G]§ 63.102(c)	Anyone seeking to use an alternative means of compliance shall collect, verify, and submit to the Administrator information that shows the alternative means achieves equivalent emission reductions.	None	None	None
PRO-OFP	EP	63FFFF	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2460(a) § 63.2450(b) § 63.2460(b)	You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c).	[G]§ 63.1257(d)(2)(i) [G]§ 63.1257(d)(2)(ii) § 63.2460(b)(1) § 63.2460(b)(2) § 63.2460(b)(3) [G]§ 63.2460(b)(4) § 63.2460(b)(7)	§ 63.2460(b)(6)(i) § 63.2460(b)(7)	§ 63.2460(b)(6) § 63.2460(b)(6)(i) § 63.2460(b)(6)(ii) § 63.2460(b)(7)
BOIL-2	EP	R1111	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(A) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 30% averaged over a six minute period.	[G]§ 111.111(a)(1)(F) *** See Periodic Monitoring Summary	None	None
CONVERT	EP	63G-ABS	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less	§ 63.114(c) § 63.114(e) [G]§ 63.115(f)	§ 63.118(a)(1) [G]§ 63.152(a)	§ 63.114(c) § 63.114(e) § 63.117(f) [G]§ 63.151(b) § 63.151(e)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						stringent or as specified. §63.113(a)(2)(i)-(ii)			\$ 63.151(e)(1) \$ 63.151(e)(2) \$ 63.151(e)(3) \$ 63.151(e)(5) \$ 63.151(f)(1) \$ 63.151(f)(2) \$ 63.151(f)(3) \$ 63.151(h) [G]\$ 63.151(h) [G]\$ 63.152(a) \$ 63.152(b) [G]\$ 63.152(b) [G]\$ 63.152(b)(1) [G]\$ 63.152(c)(1) \$ 63.152(c)(4)(ii) [G]\$ 63.152(c)(6)
CONVERT	EP	63G- CATINC	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) § 63.116(b)	Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii)	§ 63.114(a) § 63.114(a)(1)(ii) § 63.114(d)(2) § 63.114(e) [G]§ 63.115(f)	§ 63.114(a)(1) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(4) [G]§ 63.152(a) [G]§ 63.152(f)	\$ 63.114(e) \$ 63.117(f) \$ 63.118(f)(1) \$ 63.118(f)(2) \$ 63.118(f)(4) [G]§ 63.151(b) \$ 63.151(e) \$ 63.151(e)(2) \$ 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) \$ 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) \$ 63.152(c)(2) \$ 63.152(c)(2) \$ 63.152(c)(2)(i) § 63.152(c)(2)(ii) \$ 63.152(c)(2)(iii)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h)	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.171				
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63Н	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63Н	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B)	40 CFR Part 63,	[G]§ 63.167	Standards: Open-ended	[G]§ 63.175	§ 63.181(a)	[G]§ 63.182(a)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	valves or lines. §63.167(a)-(e).	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
F-FORM	EU	63H	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
LOAD4	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)
R-LOAD	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.126(c)	For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack.	None	§ 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii)	§ 63.152(c)(4)(iii)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
SG	EU	N/A	HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(3) § 63.6590(b)(3)(iii) [G]§ 63.6640(f)(2)	Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements, except that you must operate the engine according to the conditions described in paragraphs (f)(2)(i) through (iii) of section 63.6640.	§ 63.6640(f)(2)(iii)	§ 63.6640(f)(2)(iii)	None
GRPFOR2TK	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
GRPFORTK	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
MT-1/ TK-W-A	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping	None	§ 63.123(a)	§ 63.152(c)(4)(iii)

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						methods in §63.123(a). Not required to comply with §63.119 to §63.123.			
TK-F-6	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(a)(3)	Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123.	None	§ 63.123(a)	§ 63.152(c)(4)(iii)
TK-MEOH-1	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(f) § 63.119(a)(1) [G]§ 63.119(f)(3)	Owner or operator who routes emissions to a fuel gas system or to a process, as defined in §63.111, to comply with §63.119(a)(1), or (a)(2) shall comply with §63.119(f)(1)-(3) as applicable.	None	§ 63.123(a) [G]§ 63.123(h) [G]§ 63.152(a)	§ 63.122(c)(3) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(4)(ii)

Additional Monitoring Requirements	
Periodic Monitoring Summary	27

Periodic Monitoring Summary

Unit/Group/Process Information						
ID No.: BOIL-2						
Control Device ID No.: N/A	Control Device Type: N/A					
Applicable Regulatory Requirement						
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111					
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)					
Monitoring Information						
Indicator: Visible Emissions						
Minimum Frequency: once per calendar quarter						
Averaging Period: n/a						
Deviation Limit: Maximum Opacity: 30 percent						

Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.

If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.

	Permit Shield	
Parmit Shield		20

	Unit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
BOIL-1	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler only burns gaseous fuel
BOIL-1	N/A	40 CFR Part 60, Subpart D	Source constructed after 1978
BOIL-1	N/A	40 CFR Part 60, Subpart Db	Source heat input rate is less than 100 MMBtu/hour
BOIL-2	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler only burns gaseous fuel
BOIL-2	N/A	40 CFR Part 60, Subpart D	Source constructed before 1971
BOIL-2	N/A	40 CFR Part 60, Subpart Db	Source constructed before 1984
BOIL-2	N/A	40 CFR Part 60, Subpart Dc	Source constructed before 1989
CONVERT	N/A	40 CFR Part 60, Subpart RRR	Source not modified since 1975
F-DOW	N/A	40 CFR Part 60, Subpart VV	Source was not constructed or modified on or after $1/5/1981$
F-DOW	N/A	40 CFR Part 63, Subpart H	Source is never in organic HAP Service
F-FORM	N/A	40 CFR Part 60, Subpart VV	Source was not constructed or modified on or after January 5, 1981
F-RESIN	N/A	40 CFR Part 60, Subpart VV	Source does not produce chemicals listed in 60.489
F-RESIN	N/A	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
NCT	N/A	40 CFR Part 63, Subpart Q	No chromium-based water treatment used on/after 09/08/1994
SCT	N/A	40 CFR Part 63, Subpart Q	No chromium-based water treatment used on/after 09/08/1994

U	nit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
DIESEL-LOAD	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
LOAD1	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division.
LOAD1	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit.
LOAD2	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division.
LOAD2	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
LOAD3	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division.
LOAD3	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
LOAD4	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division.
LOAD5	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division.
LOAD5	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
LOAD6	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Except in Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, all loading and unloading of VOC other than gasoline (to or from transport vessels) is exempt from the requirements of this division.
LOAD6	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
LOAD7	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
AH-01	N/A	30 TAC Chapter 112, Sulfur Compounds	Heater only burns gaseous fuel
TR-WASH	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
GRPKETTLE	K-1, K-2, K-3, K-4, K-5	40 CFR Part 60, Subpart III	Source does not produce listed chemical

J	Jnit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRPKETTLE	K-1, K-2, K-3, K-4, K-5	40 CFR Part 60, Subpart RRR	Each source in the group is a separate batch process.
B-1	N/A	40 CFR Part 63, Subpart FFFF	No requirements for Group 2 Storage Vessels.
GRP1PF	TK-26, TK-27, TK-29	40 CFR Part 60, Subpart K	Source built pre-1973 or is less than 151,412 liters (40,000 gallons)
GRP1PF	TK-26, TK-27, TK-29	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
GRP1PFA	TK-11, TK-6, TK-7, TK-8	40 CFR Part 60, Subpart K	Unit is less than 151,412 liters (40,000 gallons)
GRP1PFA	TK-11, TK-6, TK-7, TK-8	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
GRP1UF	TK-12, TK-13	40 CFR Part 60, Subpart K	Source was built prior to 1973
GRP1UF	TK-12, TK-13	40 CFR Part 60, Subpart Kb	Source not constructed/modified since 7/1984
GRP1UF	TK-12, TK-13	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
GRP2PF	TK-2, TK-22, TK-3, TK-30, TK-32, TK-33, TK-37, TK-38, TK-43, TK-47, TK-50, TK-52	40 CFR Part 60, Subpart Kb	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).
GRP2PF	TK-2, TK-22, TK-3, TK-30, TK-32, TK-33, TK-37, TK-38, TK-43, TK-47, TK-50, TK-52	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
GRP2PFA	TK-48, TK-49	40 CFR Part 60, Subpart Kb	Storage capacity is less than 20,000 gallons (75

	Unit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			cubic meters).
GRP2PFA	TK-48, TK-49	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
GRP2PFB	TK-53, TK-55	40 CFR Part 60, Subpart Kb	Storage capacity is less than 20,000 gallons (75 cubic meters).
GRP2PFB	TK-53, TK-55	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
GRP2UF	TK-23, TK-24, TK-42, TK-57, TK-58, TK-59, TK-60	40 CFR Part 60, Subpart Kb	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).
GRP2UF	TK-23, TK-24, TK-42, TK-57, TK-58, TK-59, TK-60	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
GRP-B	TK-RM-14, TK-RM-15, TK-RM-16	40 CFR Part 60, Subpart Kb	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).
GRP-B	TK-RM-14, TK-RM-15, TK-RM-16	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
GRPFORTK	TK-F-10, TK-F-7, TK-F-8, TK-F-9	40 CFR Part 60, Subpart K	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).

U	Jnit/Group/Process	Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
MT-1/TK-W-A	N/A	40 CFR Part 60, Subpart Kb	Source capacity is less than 20,000 gallons (75 cubic meters)
RWSUMP	N/A	40 CFR Part 60, Subpart K	Product stored is not petroleum
TK-25	N/A	40 CFR Part 60, Subpart K	Source was built prior to 1973
TK-25	N/A	40 CFR Part 60, Subpart Kb	Source not constructed/modified since July 1984
TK-25	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit
TK-4	N/A	40 CFR Part 60, Subpart K	Source not constructed/modified since 7/1984
TK-4	N/A	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
TK-9	N/A	40 CFR Part 60, Subpart K	Source capacity less than 151,412 liters (40,000 gallons)
TK-9	N/A	40 CFR Part 60, Subpart Kb	Source not constructed/modified since 7/1984
TK-9	N/A	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit
TK-AC-1	N/A	40 CFR Part 60, Subpart K	Source capacity less than 40 cubic meters (10,000 gallons)
TK-DETA	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 20,000 gallons (75 cubic meters).
TK-LS	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation Basis of Determination		
ID No.	Group/Inclusive Units			
TK-MEOH-1	N/A	40 CFR Part 60, Subpart K	Product stored is not petroleum	
TK-MMA	N/A	40 CFR Part 60, Subpart Kb	Source capacity is less than 20,000 gallons (75 cubic meters).	
TK-NOV-E	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 20,000 gallons (75 cubic meters).	
TK-NOV-E	N/A	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit.	
TK-NOV-N	N/A	40 CFR Part 60, Subpart Kb	Source capacity is less than 20,000 gallons (75 cubic meters).	
TK-NOV-N	N/A	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit.	
TK-NOV-S	N/A	40 CFR Part 60, Subpart K	Source was built prior to 1973	
TK-NOV-S	N/A	40 CFR Part 60, Subpart Kb	Source not constructed/modified since 7/1984.	
TK-NOV-S	N/A	40 CFR Part 63, Subpart F	Source not part of Chemical Manufacturing Process Unit.	
TK-RM-12	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).	
TK-RM-12	N/A	40 CFR Part 63, Subpart G	Source not part of Chemical Manufacturing Process Unit	
TK-RM-13	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is greater than 20,000 gallons (75	

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
			cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).
TK-RM-4	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 75 cubic meters.
TK-RM-5	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 20,000 gallons (75 cubic meters).
TK-SG	N/A	40 CFR Part 60, Subpart Kb	Source capacity is less than 20,000 gallons (75 cubic meters).
TK-TOFA	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).
TK-T-T TANK	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 20,000 gallons (75 cubic meters).
TK-TW-1	N/A	40 CFR Part 60, Subpart K	Source capacity less than 40 cubic meters (10,000 gallons)
TK-W-C	N/A	40 CFR Part 60, Subpart Kb	Storage tank does not store volatile organic liquids.
TK-W-D	N/A	40 CFR Part 60, Subpart Kb	Storage tank does not store volatile organic liquids.
TK-WW-1	N/A	40 CFR Part 60, Subpart K	Storage capacity is greater than 20,000 gallons (75 cubic meters) and less than 40,000 gallons (151 cubic meters) with a maximum true vapor pressure of less than 2.2 psia (15.2 kPa).
WTB	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 75 cubic meters.

Permit Shield

The Executive Director of the TCEQ has determined that the permit holder is not required to comply with the specific regulation(s) identified for each emission unit, group, or process in this table.

Unit/Group/Process		Regulation	Basis of Determination	
ID No.	Group/Inclusive Units			
TK-WWTP1	N/A	40 CFR Part 63, Subpart DD	Source doesn't receive waste from off-site facility.	
TK-WWTP1	N/A	40 CFR Part 63, Subpart QQ	The affected facility is not a surface impoundment for which another subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpa QQ for air emission control.	
TK-WWTP2	N/A	40 CFR Part 63, Subpart DD	Source doesn't receive waste from off-site facility.	
TK-WWTP2	N/A	40 CFR Part 63, Subpart QQ	The affected facility is not a surface impoundment for which another subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart QQ for air emission control.	
TK-WWTP3	N/A	40 CFR Part 63, Subpart DD	Source doesn't receive waste from off-site facility.	
TK-WWTP3	N/A	40 CFR Part 63, Subpart QQ	The affected facility is not a surface impoundment for which another subpart of 40 CFR Parts 60, 61, or 63 references the use of 40 CFR Part 63, Subpart QQ for air emission control.	

New Source Review Authorization References by Emission Unit.......40

New Source Review Authorization References

The New Source Review authorizations listed in the table below are applicable requirements under 30 TAC Chapter 122 and enforceable under this operating permit.

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.				
Authorization No.: 4603 Issuance Date: 03/24/2017				
Authorization No.: 97916	Issuance Date: 09/09/2011			
Permits By Rule (30 TAC Chapter 106) for	the Application Area			
Number: 106.183 Version No./Date: 06/18/1997				
Number: 106.261 Version No./Date: 11/01/2003				
Number: 106.262 Version No./Date: 11/01/2003				
Number: 106.371 Version No./Date: 09/04/2000				
Number: 106.472	Version No./Date: 03/14/1997			
Number: 106.472	Version No./Date: 09/04/2000			
Number: 106.476 Version No./Date: 09/04/2000				
Number: 106.478	Version No./Date: 03/14/1997			
Number: 106.511 Version No./Date: 09/04/2000				
Number: 8	Version No./Date: 11/05/1986			
Number: 51	Version No./Date: 11/05/1986			
Number: 91 Version No./Date: 07/20/1992				

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
AH-01	JOHN ZINC ACTIVATION HEATER	106.183/06/18/1997
B-1	BLEND TANK	4603
BOIL-1	BOILER NO. 1-25.2 MMBTU/HR	4603
BOIL-2	BOILER NO. 2-20.92 MMBTU/HR	4603
CONVERT	FORMALDEHYDE PLANT METHANOL CONVERTER	4603
DIESEL-LOAD	TRUCK FUELING STATION	106.472/03/14/1997
F-DOW	FORMALDEHYDE PLANT-DOWTHERM FUGITIVES	4603
F-FORM	FORMALDEHYDE PLANT FUGITIVES	4603
F-RESIN	RESIN PLANT FUGITIVES	4603
K-1	KETTLE K-1	4603
K-2	KETTLE K-2	4603
K-3	KETTLE K-3	4603
K-4	KETTLE K-4	4603
K-5	KETTLE K-5	4603
KDRUMST	REACTOR ROOM DRUMMING STATION	4603
LOAD1	K-3 LOADING RACK	4603
LOAD2	RESIN AND DISTILLATE LOADING RACK	4603
LOAD3	RESIN AND UREA WATER LOADING RACK	4603
LOAD4	FORMALDEHYDE/UFC LOADING/UNLOADING RACK	4603

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
LOAD5	INSULATION RESIN/ OFP LOADING RACK	4603
LOAD6	RM UNLOADING RAMP	106.261/11/01/2003, 106.262/11/01/2003, 106.472/09/04/2000
LOAD7	METHANOL UNLOADING RACKS-TRUCK AND RAIL	4603
MT-1/TK-W-A	MIX TANK 1/ WEIGH TANK A	4603
NCT	NORTH COOLING TOWER	106.371/09/04/2000
NOVHOOD	PASTILLATOR 1	4603
PAST2	PASTILLATOR 2	4603
PROFORMAL	PROFORMAL	4603
PRO-OFP	BLEND TANK VENT	4603
R-LOAD	RAILCAR LOADING	4603
RWSUMP	RED WATER SUMP	4603
SALTSILO	SALT SILO WITH BAGHOUSE	91/07/20/1992
SCT	SOUTH COOLING TOWER	106.371/09/04/2000
SG	STAND-BY GENERATOR	106.511/09/04/2000
SLUDGEPRS	WWTP SLUDGE PRESS	4603
TK-11	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-12	HEAVY DISTILLATE STORAGE TANK	106.472/03/14/1997
TK-13	HEAVY DISTILLATE STORAGE TANK	4603

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-22	GLYCOL ETHER EB/ DB STORAGE TANK	4603
TK-23	PF RESIN STORAGE TANK	4603
TK-24	PF RESIN STORAGE TANK	4603
TK-25	PF RESIN STORAGE TANK	4603
TK-26	PF RESIN STORAGE TANK	4603
TK-27	PF RESIN STORAGE TANK	4603
TK-29	PF RESIN STORAGE TANK	4603
TK-2	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-30	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-32	HEAVY DISTILLATE STORAGE TANK	106.472/03/14/1997
TK-33	HEAVY DISTILLATE STORAGE TANK	106.472/03/14/1997
TK-37	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-38	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-3	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-42	PF RESIN STORAGE TANK	106.472/09/04/2000
TK-43	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-47	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-48	MINERAL OIL STORAGE TANK	106.472/03/14/1997
TK-49	DIESEL STORAGE TANK	106.472/03/14/1997

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-4	LIGHT DISTILLATE TANK	106.472/03/14/1997
TK-50	MTO STORAGE TANK	106.472/03/14/1997
TK-52	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-53	BUTOXYTRIGLYCOL STORAGE TANK	106.472/09/04/2000
TK-55	PF RESIN STORAGE TANK	106.472/09/04/2000
TK-57	OILFIELD PRODUCT STORAGE TANK	106.472/03/14/1997
TK-58	OILFIELD PRODUCT STORAGE TANK	106.472/03/14/1997
TK-59	OILFIELD PRODUCT STORAGE TANK	106.472/03/14/1997
TK-60	OILFIELD PRODUCT STORAGE TANK	106.472/03/14/1997
TK-6	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-7	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-8	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-9	PF RESIN STORAGE TANK	106.472/03/14/1997
TK-AC-1	FORMIC ACID/ ACID QUENCH TANK	106.476/09/04/2000
TK-DETA	DIETHYLENETRIAMINE STORAGE TANK	106.472/09/04/2000
TK-F-10	FORMALDEHYDE STORAGE TANK F-10	4603
TK-F-1	FORMALDEHYDE STORAGE TANK F-1	4603
TK-F-2	FORMALDEHYDE STORAGE TANK F-2	4603
TK-F-3	FORMALDEHYDE STORAGE TANK F-3	4603

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-F-4	FORMALDEHYDE STORAGE TANK F-4	4603
TK-F-5	FORMALDEHYDE STORAGE TANK F-5	4603
TK-F-6	FORMALDEHYDE STORAGE TANK F-6	4603
TK-F-7	FORMALDEHYDE STORAGE TANK F-7	4603
TK-F-8	FORMALDEHYDE STORAGE TANK F-8	4603
TK-F-9	FORMALDEHYDE STORAGE TANK F-9	4603
TK-LS	LIQUID SILO STORAGE TANK	4603
TK-MEOH-1	METHANOL STORAGE TANK	4603
TK-MMA	MOLTEN MALEIC ANHYDRIDE TANK	106.262/11/01/2003
TK-NOV-E	EAST HOT FLAKE TANK	4603
TK-NOV-N	NORTH HOT FLAKE TANK	4603
TK-NOV-S	SOUTH HOT FLAKE TANK	4603
TK-RM-12	CAUSTIC STORAGE TANK	106.472/09/04/2000
TK-RM-13	PRECAT TANK- RAILROAD RAINWATER CONTAINMENT	106.472/09/04/2000
TK-RM-14	PHENOL STORAGE TANK	4603
TK-RM-15	OVERFLOW CONTAINMENT TANK	4603
TK-RM-16	PHENOL STORAGE TANK	4603
TK-RM-4	28% AMMONIA STORAGE TANK	106.478/03/14/1997
TK-RM-5	CRESYLIC ACID STORAGE TANK	4603

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
TK-SG	STANDBY GENERATOR DIESEL STORAGE TANK	106.472/09/04/2000
TK-TOFA	TALL OIL FATTY ACID STORAGE TANK	106.472/09/04/2000
TK-T-T TANK	TRANSPORTATION DIESEL TANK	106.472/09/04/2000
TK-TW-1	WASH WATER TANK	106.472/09/04/2000
TK-W-C	WEIGH TANK C	4603
TK-W-D	CAUSTIC MINI WEIGH TANK	4603
TK-WW-1	TREATED WASTE WATER HOLD TANK	106.472/09/04/2000
TK-WWTP1	WASTE WATERTREATMENT POND 1	4603
TK-WWTP2	WASTE WATERTREATMENT POND 2	4603
TK-WWTP3	WASTE WATERTREATMENT CONCRETE TANK	4603
TR-WASH	TRUCK WASHING STATION	4603
WTB	WEIGH TANK B	4603

	Alternative Requirement	
Alternative Requirement		 47



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 6 RE

1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

SEP: 2 7 2800

Mr. James W. Cutbirth

Regional-Environmental Engineer
Georgia-Pacific Resins, Inc.
P.O. Box 938

Lufkin, TX 75902-0938

Re: Waiver of Performance Testing and Approval of Alternative Monitoring Hazardous Organic NESHAP (HON)
Georgia-Pacific Resins, Inc., Lufkin Plant
TNRCC Account No. AC-0011-N, Permit No. 4603

Dear Mr. Cutbirth:

On May 15, 2000, Georgia-Pacific Resins, Inc. (GPRI) submitted a report of HON performance testing which was conducted on March 9-10, 2000 at its Lufkin Plant. The HON performance testing was conducted on the catalytic oxidizer utilized to control tail gas emissions from the formaldehyde production process. This test was conducted to assure the new catalyst placed within the catalytic oxidizer was functioning as it should and that all permit limitations were being met. The tail gas from the formaldehyde production process is a Group 1 process vent. Compliance for this Group 1 process vent is met by reducing emissions of total organic hazardous air pollutants (HAP) by 98 weight-percent, in accordance with 40 CFR 63.113(a)(2). The catalytic oxidizer did not achieve a 98 weight-percent reduction (DRE) in organic HAP emissions on a stand-alone basis during the performance testing. However, a 98% DRE in organic HAP emissions was achieved by using the combined control of the formaldehyde absorber (the final recovery device) and the catalytic oxidizer (a control device) in accordance with 40 CFR 63.113(a)(2)(ii).

Performance test methods and procedures to determine compliance with 40 CFR 63.113(a)(2) are presented in 40 CFR 63.116(c). Sampling sites shall be located at the inlet of the control device and at the outlet of the control device to determine compliance with the 98 percent reduction of total organic HAP requirement. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D of Appendix A to 40 CFR Part 60, as appropriate. Method 18 of Appendix A to 40 CFR Part 60 shall be used to determine compliance with the 98 percent reduction requirement of 40 CFR 63.113(a)(2). Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of Appendix A to 40 CFR Part 63 may be used. The performance testing was conducted by a contractor, DEECO, Inc. of Cary, North Carolina. DEECO used Method 2 to determine the gas volumetric flow rate and Fourier Transform Infrared methodology to determine the HAP concentration at the outlet of

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the catalytic oxidizer. The Fourier Transform Infrared methodology was validated by DEECO, using Method 320, in the fall of 1999 at GPRI's formaldehyde plant in Vienna, Georgia. By letter dated April 4, 2000, EPA's Emissions, Monitoring, and Analysis Division in Research Park, North Carolina approved the use of Method 320 in lieu of Method 18 by GPRI for determining concentrations of HAP from the formaldehyde process.

The performance testing was conducted at a minimum formaldehyde solution production rate of 4,872 lbs/hr and a maximum formaldehyde solution production rate of 6,786 lbs/hr. The test results are summarized in the following tables.

Maximum Production Rate

	Run 1	Run 2	Run 3	Average
HAP at absorber inlet, lbs/hr	6,786	6,786	6,786	6,786
HAP at catalytic oxidizer outlet, lbs/hr	1.2	1.4	1.1	1.2
DRE for HAP, %	99.98	99.98	99.98	99.98

Minimum Production Rate

	Run I	Run 2	Run 3	Average
HAP at absorber inlet, lbs/hr	4.872	4,872	4,872	4,872
HAP at catalytic oxidizer outlet, lbs/hr	0.9	0.6	0.6	0.7
DRE for HAP, %	99.98	99.99	99.99	99.99

Pursuant to 40 CFR 63.7(e)(2)(iv), we are waiving the requirement, in 40 CFR 63.116(c), for GPRI to conduct performance testing at the inlet and the outlet of the control device, in order to demonstrate a 98 weight-percent reduction in organic HAP emissions from the tail gas vent from the formaldehyde production process. GPRI has demonstrated, to our satisfaction, that the tail gas vent is in compliance with the requirement for a 98 weight-percent reduction in organic HAP emissions by conducting performance testing to determine the mass emission rate of total organic HAP at the outlet of the catalytic oxidizer at the minimum and maximum production rates of formaldehyde solution.

Monitoring requirements for process vents are presented in 40 CFR 63.114. Where an absorber is the final recovery device in the recovery system, a scrubbing liquid temperature monitoring device and a specific gravity monitoring device, each equipped with a continuous recorder, are required to be used by 40 CFR 63.114(b)(1). By letter dated July 10, 2000, GPRI notified us that GPRI currently continuously monitors the temperature of the cold water on the final tray of the absorber, but does not currently monitor specific gravity. GPRI requested permission to monitor conductivity rather than specific gravity. Pursuant to

40 CFR 63.114(c)(3), we are approving the monitoring of the conductivity of the chilled/cold water of the top tray of the absorber rather than the specific gravity, as is specified in 40 CFR 63.114(b)(1). The conductivity shall be monitored continuously and readings shall be recorded at intervals of one hour.

By letter dated August 18, 2000, we notified the Texas Natural Resource Conservation Commission (TNRCC) of our intention to grant this waiver and approve this alternative monitoring. The TNRCC did not have any objections to our granting this waiver and approving this alternative monitoring, nor any proposed conditions to this waiver and this alternative monitoring.

If you have any questions concerning this matter, please contact Mr. George V. Marusak, of my staff, at (214) 665-8366.

Sincerely yours,

John R. Hepola

Chief

Air/Toxics and Inspection Coordination Branch

cc: Jeffrey P. Greif, TNRCC
David Bower, TNRCC
Marion Everhart, TNRCC Region 10
Jay Low, TNRCC Region 10
Hollis McAdams, GPRI - Lufkin

Appendix A				
Acronym List				

Acronym List

The following abbreviations or acronyms may be used in this permit:

ACFM	actual cubic feet per minute
	alternate means of control
	Acid Rain Program
	American Society of Testing and Materials
	Beaumont/Port Arthur (nonattainment area)
	Compliance Assurance Monitoring
	control device
	continuous opacity monitoring system
	closed-vent system
	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
ElP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
	grains per 100 standard cubic feet
	hazardous air pollutant
	Houston/Galveston/Brazoria (nonattainment area)
	hydrogen sulfide
	identification number
lb/hr	pound(s) per hour
	Million British thermal units per hour
	monitoring, recordkeeping, reporting, and testing
	nonattainment
	not applicable
NO _x	nitrogen oxides New Source Performance Standard (40 CFR Part 60)
NSPS	New Source Performance Standard (40 CFR Part 60)
	New Source Review
	Office of Regulatory Information Systems
	lead
	Permit By Rule
	particulate matter
	parts per million by volume
	prevention of significant deterioration
•	
	total suspended particulate
	true vapor pressure
VUC	volatile organic compound